



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

648.4702
Job Sheet 171670



001506

Part No: 648.4702

Job Qty: 1 ea

Part Name: C3 Overhaul



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 2/7/18

Job Tracking No:

Due Date: 2/16/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: O&OPM-C3 REV.4 IPP REV:A 17.12.11 NEW ISSUE DD VERF:JFS

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea		2/15/18	0.00	0.00	Start Up Stores/Pkg-1		MLE
110	Small Fab	1 pcs		2/16/18	0.00	1.00	Small Fab-9		M LASE
120	QC	1 pcs		2/16/18	0.00	0.00	QC4		38
125	DC	1 pcs		2/16/18	0.00	0.00	DC		9-89
130	Packaging	1 pcs		2/16/18	0.00	0.00	Packaging3-1		6 MAR 13 2018
140	QC21-FG	1 Ea		2/16/18	0.00	0.00	QC21		6 9-89

Part Op 110 - Pick kit

Descriptions: 125 - Photocopy bluefile & type labels per PPP 648.7402

130 - Identify and pack for shipping as per PPP 648.4702

DAS
21
9-89

MAR 16 2018

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
188-FPSS-1032-1/4	Set Screw	2 Ea (2 ea)	90-Start up Operation	
188-FSCS-832-5/8	Clock Spring Cover Screw	4 Ea (4 ea)	90-Start up Operation	
600.1309-A	Label	1 Ea (1 ea)	90-Start up Operation	
600.1313	C3 Warning Label	1 Ea (1 ea)	90-Start up Operation	
AN4-16A	Bolt	3 Ea (3 ea)	90-Start up Operation	
C2-14-2	Label Rivets	2 Ea (2 ea)	90-Start up Operation	
C2-3-1	Bearing DU	2 (2 ea)	90-Start up Operation	
C2-3-2-1	Roller Pin Retaining Ring	2 (2 ea)	90-Start up Operation	
C2-3-3-1	Latch Roller DU Bearing	1 Ea (1 ea)	90-Start up Operation	
C2-3-5	Spacer, Teflon	2 (2 ea)	90-Start up Operation	
C2-3-8	Actuator Bushing	2 Ea (2 ea)	90-Start up Operation	
C3-10-2	Lock Spring	1 Ea (1 ea)	90-Start up Operation	
C3-12-1	Lock Bushing	2 Ea (2 ea)	90-Start up Operation	
C3-12-6 (5100-0037-SPP)	Lock Roller Retaining Ring	2 (2 ea)	90-Start up Operation	
C3-13-1 (06FDU04)	Keeper DU-Bearing Bushing	2 (2 ea)	90-Start up Operation	
C3-13-5 (DENDOFF)	Keeper Spring	1 (1 ea)	90-Start up Operation	
C3-3-4-1 (5100-0012-SPP)	Retaining Ring	4 (4 ea)	90-Start up Operation	
C3-3-9	Actuator Spring	1 (1 ea)	90-Start up Operation	
C3-4-1	Load Beam Bushing	2 Ea (2 ea)	90-Start up Operation	
C3-7-1	Load Beam Bumper	1 Ea (1 ea)	90-Start up Operation	
C3-7-2	Lock Bumper	2 Ea (2 ea)	90-Start up Operation	
C3-8-4	Solenoid Cover Gasket	1 (1 ea)	90-Start up Operation	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube Machining ☐ Cross tube Small ☐ Water Jet ☐ Engineering Quality Other ☐																																																																																																																																					
Date : _____ Step #: _____		(SI042) Approval _____																																																																																																																																					
Description Work Order Deviation		Completed By _____ d / Supervisor I Verification _____ Coordinator Approval _____																																																																																																																																					
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4" style="text-align: left; padding: 5px;">Root Cause</th> </tr> </thead> <tbody> <tr> <td style="width: 15%;">Environment</td> <td style="width: 15%;">☐</td> <td style="width: 15%;">No Re-verification</td> <td style="width: 15%;">☐</td> </tr> <tr> <td>Design</td> <td>☐</td> <td>Operator</td> <td>☐</td> </tr> <tr> <td>Doc/Data</td> <td>☐</td> <td>Offset/Setup</td> <td>☐</td> </tr> <tr> <td>Equip/Tooling</td> <td>☐</td> <td>Supplier</td> <td>☐</td> </tr> <tr> <td>Handling/Pre</td> <td>☐</td> <td>Training</td> <td>☐</td> </tr> <tr> <td>Material</td> <td>☐</td> <td>Use for Testing</td> <td>☐</td> </tr> <tr> <td>Internal Transport</td> <td>☐</td> <td>Poor Information</td> <td>☐</td> </tr> <tr> <td>Tribal Knowledge</td> <td>☐</td> <td>Rushing</td> <td>☐</td> </tr> <tr> <td>LOA</td> <td>☐</td> <td>Product Improvement</td> <td>☐</td> </tr> <tr> <td>Substation</td> <td>☐</td> <td>Process Improvement</td> <td>☐</td> </tr> <tr> <td>Past Expiry Date</td> <td>☐</td> <td>Manufacturing Process</td> <td>☐</td> </tr> <tr> <td>Misidentified</td> <td>☐</td> <td>Past Due</td> <td>☐</td> </tr> <tr> <td colspan="2"></td> <td>Pressure/Forced</td> <td>☐</td> </tr> <tr> <td colspan="2"></td> <td>Bending</td> <td>☐</td> </tr> <tr> <td colspan="2"></td> <td>Centre Not Concentric</td> <td>☐</td> </tr> <tr> <td colspan="2"></td> <td>Cracks</td> <td>☐</td> </tr> <tr> <td colspan="2"></td> <td>Crimp/Kink/Ripple/Wave</td> <td>☐</td> </tr> <tr> <td colspan="2"></td> <td>Cuffs</td> <td>☐</td> </tr> <tr> <td colspan="2"></td> <td>Crushing</td> <td>☐</td> </tr> <tr> <td colspan="2"></td> <td>Heat Treat</td> <td>☐</td> </tr> <tr> <td colspan="2"></td> <td>Wave/Twist in Tube</td> <td>☐</td> </tr> <tr> <td colspan="2"></td> <td>Marks/Chatter</td> <td>☐</td> </tr> <tr> <td colspan="2"></td> <td>Temperature/ Set-up</td> <td>☐</td> </tr> <tr> <td colspan="2"></td> <td>BOM/Route</td> <td>☐</td> </tr> <tr> <td colspan="2"></td> <td>Broken/Damag</td> <td>☐</td> </tr> <tr> <td colspan="2"></td> <td>Inspection Inco</td> <td>☐</td> </tr> <tr> <td colspan="2"></td> <td>Contamination</td> <td>☐</td> </tr> <tr> <td colspan="2"></td> <td>Countersink</td> <td>☐</td> </tr> <tr> <td colspan="2"></td> <td>Cut Too Short</td> <td>☐</td> </tr> <tr> <td colspan="2"></td> <td>Instructions Inco</td> <td>☐</td> </tr> <tr> <td colspan="2"></td> <td>Drill Holes</td> <td>☐</td> </tr> <tr> <td colspan="4" style="text-align: left;"> OTHER : _____ </td> </tr> </tbody> </table>			Root Cause				Environment	☐	No Re-verification	☐	Design	☐	Operator	☐	Doc/Data	☐	Offset/Setup	☐	Equip/Tooling	☐	Supplier	☐	Handling/Pre	☐	Training	☐	Material	☐	Use for Testing	☐	Internal Transport	☐	Poor Information	☐	Tribal Knowledge	☐	Rushing	☐	LOA	☐	Product Improvement	☐	Substation	☐	Process Improvement	☐	Past Expiry Date	☐	Manufacturing Process	☐	Misidentified	☐	Past Due	☐			Pressure/Forced	☐			Bending	☐			Centre Not Concentric	☐			Cracks	☐			Crimp/Kink/Ripple/Wave	☐			Cuffs	☐			Crushing	☐			Heat Treat	☐			Wave/Twist in Tube	☐			Marks/Chatter	☐			Temperature/ Set-up	☐			BOM/Route	☐			Broken/Damag	☐			Inspection Inco	☐			Contamination	☐			Countersink	☐			Cut Too Short	☐			Instructions Inco	☐			Drill Holes	☐	OTHER : _____				Wrong dimensions or tolerance or missing or difference Container No: S049011 Part: 648.4702 Job No: 171670 Serial No/Batch: S049011 Revision: 4 Inspector: _____ Date: 03/08/18
Root Cause																																																																																																																																							
Environment	☐	No Re-verification	☐																																																																																																																																				
Design	☐	Operator	☐																																																																																																																																				
Doc/Data	☐	Offset/Setup	☐																																																																																																																																				
Equip/Tooling	☐	Supplier	☐																																																																																																																																				
Handling/Pre	☐	Training	☐																																																																																																																																				
Material	☐	Use for Testing	☐																																																																																																																																				
Internal Transport	☐	Poor Information	☐																																																																																																																																				
Tribal Knowledge	☐	Rushing	☐																																																																																																																																				
LOA	☐	Product Improvement	☐																																																																																																																																				
Substation	☐	Process Improvement	☐																																																																																																																																				
Past Expiry Date	☐	Manufacturing Process	☐																																																																																																																																				
Misidentified	☐	Past Due	☐																																																																																																																																				
		Pressure/Forced	☐																																																																																																																																				
		Bending	☐																																																																																																																																				
		Centre Not Concentric	☐																																																																																																																																				
		Cracks	☐																																																																																																																																				
		Crimp/Kink/Ripple/Wave	☐																																																																																																																																				
		Cuffs	☐																																																																																																																																				
		Crushing	☐																																																																																																																																				
		Heat Treat	☐																																																																																																																																				
		Wave/Twist in Tube	☐																																																																																																																																				
		Marks/Chatter	☐																																																																																																																																				
		Temperature/ Set-up	☐																																																																																																																																				
		BOM/Route	☐																																																																																																																																				
		Broken/Damag	☐																																																																																																																																				
		Inspection Inco	☐																																																																																																																																				
		Contamination	☐																																																																																																																																				
		Countersink	☐																																																																																																																																				
		Cut Too Short	☐																																																																																																																																				
		Instructions Inco	☐																																																																																																																																				
		Drill Holes	☐																																																																																																																																				
OTHER : _____																																																																																																																																							

NAS1149F0463P	Washer	8 Ea (8 ea)	90-Start up Operation	
MS21044N4	Nut, Self-Locking	4 Ea (4 ea)	90-Start up Operation	
AN4-17A	Bolt	1 Ea (1 ea)	90-Start up Operation	
MS21083N3	Nut	2 Ea (2 ea)	90-Start up Operation	
NAS1149F0332P	Washer	2 Ea (2 ea)	90-Start up Operation	
MS35266-63	Solenoid Cover Screw	1 Ea (1 ea)	90-Start up Operation	
NAS1149F0363P	Washer	1 Ea (1 ea)	90-Start up Operation	
AN6-15A	Bolt	1 Ea (1 ea)	90-Start up Operation	
MS21083N6	Nut	1 Ea (1 ea)	90-Start up Operation	
NAS1149F0632P	Washer	2 Ea (2 ea)	90-Start up Operation	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	- 188-FPSS-1032-1/4	2	25	0
	- 188-FSCS-832-5/8	4	100	0
	- 600.1309-A	1	0	0
	- 600.1313	1	6	0
	- 343 AN4-16A	3	245	0
	- 343 AN4-17A	1	699	0
	- 334 AN6-15A	1	7	0
91654A106	- C2-14-20	2	0	0
06DU04	- C2-3-1	2	0	0
	- C2-3-2-1	2	0	0
	- C2-3-3-1	1	0	0
95606A140	- C2-3-5	2	0	0
	- C2-3-8	2	0	0
	- C3-10-2	1	0	0
	- C3-12-1	2	40	0
	- C3-12-6 (5100-0037-SPP)	2	0	0
	- C3-13-1 (06FDU04)	2	0	0
	- C3-13-5 (DENDOFF)	1	0	0
	- C3-3-4-1 (5100-0012-SPP)	4	0	0
	- C3-3-9	1	0	0
	- C3-4-1	2	0	0
	- C3-7-1	1	0	0
	- C3-7-2	2	0	0
	- C3-8-4	1	0	0
	- 304 MS21044N4	4	39	0
	- 302 MS21083N3	2	100	0
	- 298 MS21083N6	1	30	0
	- 270 MS35266-63	1	50	0
	- 20 NAS1149F0332P	2	3,883	0
	- 262 NAS1149F0363P	1	285	0
	- 11 NAS1149F0463P	8	174	0
	- 11 NAS1149F0632P	2	60	0

Part Specifications

Specifications could not be found.

QQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐				
Misidentified ☐	Past Due ☐	OTHER : _____			